

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 13. (Canceled).

14. (Currently Amended) ~~The A method according to Claim 9, for~~
manufacturing a low-sintering PZT-based piezoelectric ceramic material having the
general formula $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$, comprising: mixing together ions added in the form of
powdered oxides or powdered carbonates of at least lead, zirconium and titanium as
starting compounds, and calcining the starting compounds to form the piezoelectric
ceramic material, wherein after calcining the starting compounds, lithium in salt form
is added to the mixture in an amount in the range of 0.01 to 0.1 wt.% in relation to
the weight of the PZT ceramic, wherein a sintering temperature in the range of 850°C
to 950°C is obtained for the mixture of calcined starting compounds and ionic lithium;

wherein the starting compound mixture is doped using combinations of elements selected from the group consisting of Ca, La, Nb, Fe, and Cu.

15. (Currently Amended) ~~The A method according to Claim 10, for~~
manufacturing a low-sintering PZT-based piezoelectric ceramic material having the
general formula $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$, comprising: mixing together ions added in the form of
powdered oxides or powdered carbonates of at least lead, zirconium and titanium as
starting compounds, and calcining the starting compounds to form the piezoelectric
ceramic material, wherein after calcining the starting compounds, lithium in salt form
is added to the mixture in an amount in the range of 0.01 to 0.1 wt.% in relation to
the weight of the PZT ceramic, wherein a sintering temperature in the range of 850°C
to 950°C is obtained for the mixture of calcined starting compounds and ionic lithium;

wherein lithium is added in the form of Li_2CO_3 or LiNO_3 ; and

wherein the starting compound mixture is doped using combinations of elements selected from the group consisting of Ca, La, Nb, Fe, and Cu.

Claims 16 to 22. (Canceled).